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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/914,537

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Gerhard J Bleys

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

10/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/914,537

Applicant(s)

BLEYS ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-12 and 16-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-12 and 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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1. Claims 22 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Despite applicants' remarks, adequate support has not been found for the subject matter of claims 22 and 23. With respect to claim 22, applicants' citation at page 12 of the specification refers to using one or more release agents, as opposed to coats of release agents. With respect to claim 23, applicants' citation at page 12 fails to refer to excluding an oligomeric salt agent.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 6-12, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleys ('226) or Bleys et al. ('779) or Eling et al. ('483), each in view of Payne et al. ('310).

Bleys and Bleys et al. and Eling et al. disclose the production of resilient flexible polyurethane foams prepared from the reaction of water, 4,4'-diphenylmethane diisocyanate, and polyether polyols, having greater than 50% by weight oxyethylene groups, functionalities of 2-6, and equivalent weights that overlap those claimed by applicants. See abstracts. Furthermore, patentees disclose that prepolymer processes may be employed and that the polyurethanes may be molded. See column 3, lines 53+ within Bleys. See abstract and column 5, line 13 within Bleys et al. See abstract and column 4, lines 61+ within Eling et al.

4. Though the primary references are silent regarding applicants' claimed process of coating the mold with an external release agent and producing at least 10 moldings prior to recoating the mold with the external release agent, the position is taken that, in the production of polyurethane foams, the coating of a mold with an external release agent to facilitate multiple removals of the foam from the mold without having to recoat the mold with the release agent was known at the time of invention. This position is supported by the teachings of Payne et al. Payne et al. disclose a method of molding, wherein a mold release agent is applied to a mold and several releases are obtained before recoating of the mold is required. See abstract; column 1, lines 46-52; column 4, lines 29-37; column 6, lines 6-10; and Examples. Furthermore, Payne et al. disclose at column 4, lines 16-18 that the solids content of the release agent can be manipulated to increase the number of releases per coating. Accordingly, it would have been obvious to produce moldings utilizing the disclosed foam composition of the primary references and to utilize external mold release agents, as taught by the secondary reference, so as to obtain a more efficient method of molding, wherein multiple releases are obtained without having to recoat the mold. Furthermore, one of ordinary skill in the art seeking to increase the number of releases per

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coating would have been motivated by the teachings of the reference to alter the solids content to achieve the desired result.

5. Applicants have argued that Payne et al. provide no motivation to use any particular polyol. The relevance of this argument is unclear; given the teachings of the reference, one would have reasonably expected that multiple releases can be obtained regardless of polyol selection. In view of these teachings of the reference, it is not seen that applicants have demonstrated anything unexpected. Furthermore, despite applicants' arguments, the examiner has provided the requisite motivation for combining the teachings of the references. With respect to claims 2 and 3, given the aforementioned teachings indicating that releases per coating can be increased by controlling the solids content, it has not been established that the instantly claimed number of releases is unexpected. With respect to claim 22, contrary to applicants' assertions, it is by no means clear from the teachings of the reference that a minimum of three coats is mandatory. Furthermore, as aforementioned, the reference provides guidance as to how the formulation can be modified to increase the number of releases per coating. Lastly, applicants' 37 CFR 1.132 declaration of December 22, 2006 has been considered; however, the declaration is deficient for the following reasons. Firstly, it has not been established that the foam or polyol formulation within Payne et al. is particularly relevant to the issues at hand. As aforementioned, given the teachings of the reference, one of ordinary skill in the art would have expected that multiple releases can be obtained regardless of polyol selection. The reference is clear that the release agent is effective for a variety of formulations. Secondly, given the nature of the statement within section 8 of the declaration, it is not seen that any probative value can be ascribed to the statement. No clear or definitive rationale has been set forth explaining how the

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statement has been arrived at. The statement essentially amounts to an unsubstantiated opinion that lacks any meaningful evidentiary basis.

6. Claims 1-4, 6-12, and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bleys ('226) or Bleys et al. ('779) or Eling et al. ('483), each in view of Lopes et al. ('714).

Bleys and Bleys et al. and Eling et al. disclose the production of resilient flexible polyurethane foams prepared from the reaction of water, 4,4'-diphenylmethane diisocyanate, and polyether polyols, having greater than 50% by weight oxyethylene groups, functionalities of 2-6, and equivalent weights that overlap those claimed by applicants. See abstracts. Furthermore, patentees disclose that prepolymer processes may be employed and that the polyurethanes may be molded. See column 3, lines 53+ within Bleys. See abstract and column 5, line 13 within Bleys et al. See abstract and column 4, lines 61+ within Eling et al.

7. Though the primary references are silent regarding applicants' claimed process of coating the mold with an external release agent and producing at least 10 moldings prior to recoating the mold with the external release agent, the position is taken that, in the production of polyurethane foams, the coating of a mold with an external release agent to facilitate multiple removals of the foam from the mold without having to recoat the mold with the release agent was known at the time of invention. This position is supported by the teachings of Lopes et al. Lopes et al. disclose a method of molding polyurethane foam articles, wherein a mold release agent is applied to a mold and several releases are obtained before recoating of the mold is required. See abstract; column 1, lines 5-21; column 3, lines 30+; columns 4 and 5; column 6, lines 1-32 (especially line 32); and Examples. Accordingly, it would have been obvious to produce moldings utilizing the disclosed foam composition of the primary references and to utilize

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external mold release agents, as taught by the secondary reference, so as to obtain a more efficient method of molding, wherein multiple releases are obtained without having to recoat the mold. Given the teachings of the reference, applicants have failed to establish that their results are unexpected.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.


RABON SERGENT
PRIMARY EXAMINER

R. Sergent
October 14, 2007